

TECHNOLOGY, LIFE, AND CAREERS

APPLIED TECHNOLOGY EDUCATION CORE

Unit of Credit: 1.0

SIS Course Number: 8001

SIS Code: ATE

CIP Code: 13.0001

COURSE DESCRIPTION (Levels 6-7)

The Technology, Life, and Careers (TLC) core course is an integrated exploratory program. The purpose is to allow students to be involved in activity-centered lessons which explore careers, utilize technology, and develop beginning skills. The course introduces students to career exploration and selection processes and provides information regarding additional courses and training related to the students' career fields of interest. The applied technology areas of agriculture, business, family and consumer sciences, health science and health technology, information technology, marketing, economics, and technology education are explored. The overall goals of TLC focus on 1) Self-Knowledge, 2) Education and Occupation Exploration, and 3) Career Planning.

Standard <u>8001.01</u>	The student will develop self-knowledge and skills related to the world of work and occupations.
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Objectives

- 8001-0101 Acquire self-knowledge related to education and occupation exploration.
- Identify personal likes, dislikes, abilities and talents.
 - Review and assess personal learning styles.
 - Identify how the ability to manage personal resources (e.g., time, money, talents) affects the ability to achieve personal goals.
 - Correlate the relationship of self-knowledge and personality types to career fields.
- 8001-0102 Understand the role of work in society.
- Identify the importance of work to society and the environment.
 - Describe economic contributions workers make to society.
 - Recognize the importance of academic and occupational skills in the work world.
 - Identify effects of societal, economic, and technological change on occupations.
 - Describe the relationship between work and economic and societal needs.

- 8001-0103 Recognize the effects of changing gender roles on occupations.
- Appreciate the similarities and differences among people.
 - Describe advantages and challenges of nontraditional occupations.
 - Recognize the effects of changing gender roles on occupations.
 - Describe advantages of taking courses related to personal interests, regardless of gender.
 - Identify stereotypes, biases, and discriminatory behaviors that may limit opportunities in certain occupations.
- 8001-0104 Identify and utilize the decision making/problem solving process.
- Identify the decision making/problem process.
 - Explore how decisions about education and work impact other life decisions.
 - Identify possible consequences of decisions.
 - Practice problem solving skills and explore ways to develop independence and take responsibility.

Standard 8001.02	The student will explore applied technology education and related occupations.
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Objectives

- 8001-0201 Develop a basic understanding of agriculture (farming, food, forestry, fabric, and flowers) and related careers.
- Understand the sources of food and fiber and the processes that are used to deliver them to the consumer.
 - Explore career opportunities in agricultural production and processing, agricultural mechanics, horticulture, and natural resources.
 - Understand the economic impact of agriculture on one's community, the nation, and the world.
 - Understand the economic impact of wildlife and wild lands on one's community, the nation, and the world.
 - Understand the inter-relatedness between people and society and wildlife and wild lands.
- 8001-0202 Utilize the marketing principles of product, pricing, promotion, and placement.
- Create a food and/or fabric simulation utilizing principles of marketing.
 - Use marketing principles in technology-based activities.
 - Run a business simulation which utilizes the four principles of marketing.
 - Evaluate the effectiveness of the marketing strategies.
 - Identify occupations related to marketing.

- 8001-0203 Examine health care careers in diagnostic, therapeutic, information services and environmental service clusters.
- Identify potential hazards that exist in health care and demonstrate the prevention of injury or illness through safe work practices.
 - Demonstrate technological applications as it relating to health care processes.
 - Interact effectively with all members of a simulated health care team.
 - Apply word roots, prefixes, suffixes, and combined forms used in constructing medical terms.
 - Demonstrate various methods of giving and obtaining medical information.
 - Illustrate how the health care worker's role fits into the overall health care environment.
 - Evaluate and discuss ethical practices within the health care environment.
- 8001-0204 Develop an awareness of information technology occupations through the utilization of current computer technology.
- Recognize the use of information technology systems in all facets of society and business.
 - Understand the components, operation, and proper care of computer hardware and software.
 - Understand how the issues of ethics, privacy, security, and copyright law apply to the use of information technology.
 - Understand and describe the components and benefits of computer networks.
 - Understand and describe the uses of computer programming languages.
 - Utilize software to create a multimedia presentation on the computer that includes text, audio, animation, original, and clip art graphics.
 - Utilize software to create a student web page that includes links, graphics, and color.
 - Explore occupations related to information technology careers in the eight career fields of database development and administration, digital media, enterprise systems analysis and integration, network design and administration, programming/software engineering, technical support, technical writing and web development, and administration.
- 8001-0205 Apply economic concepts to personal and workplace experiences.
- Identify natural, human, and capital resources.
 - List resources used in personal, school, and work settings.
 - Understand that resources are limited and wants/needs are unlimited.
 - Explore how limited resources affect choices people make personally, at school, and in the workplace.

- Understand that choices have costs and benefits.
- Identify examples of how choices may affect ourselves and others.
- Recognize that choices have consequences.
- Discuss how consequences may be immediate or lie in the future.

8001-0206

Develop an awareness of current technologies and safety practices used in industry.

- Explore current communication technologies and their impacts on society and the environment.
- Explore current manufacturing technologies and their impacts on society and the environment.
- Explore the different construction technologies and their impacts on society and the environment.
- Explore current transportation technologies and their impacts on society and the environment.
- Explore current energy and power technologies and their impacts on society and the environment.
- Explore technology careers related to communication, manufacturing, construction, transportation, and energy and power.

8001-0207

Develop an awareness of the basic skills related to family and consumer sciences. (self, family, nutrition and food, clothing and textiles, and child development).

- Explore the skills necessary to develop independence and a positive self-concept.
- Identify sources of stress and positive ways of dealing with it.
- Explore effective personal verbal and nonverbal communication.
- Recognize acceptable social behaviors and how to develop social skills.
- Identify various family types, life roles, and how those roles impact personal goals
- Describe the importance of balancing a career, a family, and leisure activities.
- Recognize how individual responsibilities at home contribute to the family's well being.
- Examine the impact of career choices on family lifestyles and family economics.
- Identify appropriate child care skills.
- Explore and use textile technology and equipment.
- Demonstrate consumer skills related to clothing care and construction.
- Examine skills related to nutrition, food purchases, and food preparation.
- Demonstrate basic kitchen management, food preparation, food safety and sanitation.
- Explore occupations related to family and consumer sciences in

the social/humanitarian, scientific, artistic, and technical career fields.

- 8001-0208 Develop an awareness of business occupations and utilize current business technology.
- Explain the evolution, impact, and future of technology in business.
 - Understand basic office machines/equipment (fax machines, photo copiers, postage meters, cell phones, and personal digital assistants).
 - Utilize scanners, digital cameras, and other devices to edit, insert, download, and manipulate graphic images.
 - Describe and use the electronic highway, an intranet system, the Internet, mail and news groups, search engines and web browsers.
 - Explore voice activation software and its application.
 - Use word processing and/or desktop publishing software to edit, save, print, format, merge, and publish documents.
 - Use database software to create queries and edit forms and reports.
 - Use spreadsheet software to edit, make calculations, create formulas, sort, and filter files.
 - Utilize software templates to create simple business reports and presentations.
 - Use electronic mail and fax messaging including forwarding, replying, copy notations, attachments, address books, and distribution lists.
 - Identify proper electronic communication etiquette (voice mail, electronic mail, speaker phones, video and audio conference calling, and net meetings).
 - Research business occupations, conduct job searches, and participate in job interviews.
 - Operate a simulated company.
 - Assess and report student-keyboarding competencies.
 - Practice and use correct electronic calculator/keypad and keyboarding techniques.
 - Explore careers related to business.

Standard 8001.03	The student will utilize occupational information in the career planning process.
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Objectives

- 8001-0301 Develop an awareness and understanding of six career fields.
- Learn how aptitudes and abilities relate to broad career fields.
 - Connect occupations to the scientific, artistic, technical, social humanitarian, and business career fields.
 - Incorporate appropriate work-based learning experiences into the classroom, i.e. guest speakers, virtual tours, work simulations, field trips, job shadowing, career fairs, etc.
- 001-0302 Locate and use occupational information.
- Use career information to explore various occupations of personal interest.
 - Weigh advantages and disadvantages of various school programs for the attainment of career goals.
 - Identify the requirements for secondary and post-secondary programs.
- 8001-0303 Develop basic employment and job skills.
- Recognize the importance of personal skills and attitudes to job success.
 - Describe the relationship between personal attitudes, beliefs, abilities, and skills and occupations.
 - Practice and develop personal qualities (e.g., dependability, punctuality, getting along with others) that are needed to get and keep jobs.
 - Practice skills to function effectively in a group.
- 8001-0304 Engage in the career planning process.
- Recognize how continued learning enhances the ability to achieve goals.
 - Recognize how interest, aptitudes, and abilities relate to the selection of high school courses.
 - Identify school courses that support career interests.
 - Recognize how the skills taught in school are used in various occupations.
 - Develop a Student Education Occupation Plan (SEOP).